KEPCO

KR4-4M

8084

VOLTAGE REGULATED POWER SUPPLY

MODEL KR4
KR4M*

SERIAL A-...8395

KEPCO LABORATORIES, INC.
131 - 38 Sanford Avenue
Flushing 55, New York

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SPECIFICATIONS:

DC OUTPUT VOLTAGE

VOLTAGE: 195-325 volts continuously variable.

CURRENT: 0-300 milliamperes continuous duty.

REGULATION: In the range 195-325 volts, the output voltage variation is less than 0.2 volts for line fluctuation from 105-125 volts and less than 0.2 volts for load variations from minimum to maximum current.

RIPPLE VOLTAGE: The ripple voltage is less than 3 millivolts RMS under any condition of loading and line voltage within the limits specified above.

AC OUTPUT VOLTAGES

VOLTAGE: Two 6.3 volts, unregulated, and isolated from chassis and DC output.

CURRENT: 5 amperes maximum each, may be operated in series or parallel. For series operation, 12.6 volts at 5 amperes, join terminals 5 to 6 and connect to 4 and 7. For parallel operation, 6.3 volts at 10 amperes, join terminals 4 to 6 and terminals 5 to 7 and connect to either pair.

FUSE PROTECTION: Input fuse and DC output fuses on front panel.
POWER REQUIREMENTS: 105-125 volts, 50-65 cycles.
OUTPUT TERMINATIONS: The DC and AC output terminals are brought out to a barrier strip on the rear of the chassis. Either positive or negative

terminal of the DC supply may be grounded. A terminal is provided on the barrier strip for this purpose. Two blank terminals are also provided.

*METERS: Voltmeter: 0-500 volts, 3-1/2" rectangular.

Milliammeter: 0-300 milliamperes, 3-1/2" rectangular.

CONTROLS: Power on-off switch and DC on-off switch on front panel. DC output control - screwdriver locking type mounted at the rear of the chassis.

PHYSICAL SPECIFICATIONS: Rack panel construction. Panel height 7", width 19", depth 11", color gray hammertone. This unit is designed for relay rack mounting.

OPERATING INSTRUCTIONS: The Kepco Model KR4, KR4M Regulated Power Supply is shipped with all tubes in place and is ready for operation.

PROCEDURE FOR TURNING ON POWER SUPPLY:

Turn on the AC power switch and allow the power supply 1/2 minute warm up time for the time delay relay to operate. Turn on the DC output switch to apply the regulated voltage to the load.

The time delay relay in this unit is a thermal type. When the thermal time delay relay closes, an auxiliary double pole-double throw relay is activated. One half of this relay removes the heater voltage from the time delay relay. The other half of the relay closes the primary circuit of the high voltage plate transformer. In the event that the line voltage should fail momentarily, this double pole-double throw relay will be de-energized. When the line voltage is again turned on, the DC voltage will not re-appear for approximately 30 seconds.

To adjust the DC output voltage to any setting within the range of the instrument, loosen the locking nut on voltage control. Set the control to the

desired voltage and then tighten the locking nut.

MAINTENANCE: The components of the Model KR4, KR4M Regulated Power Supply have been selected and tested to provide long and trouble-free operating life. The only service necessary should be the replacement of vacuum tubes. The location of the tubes is clearly marked on the chassis.

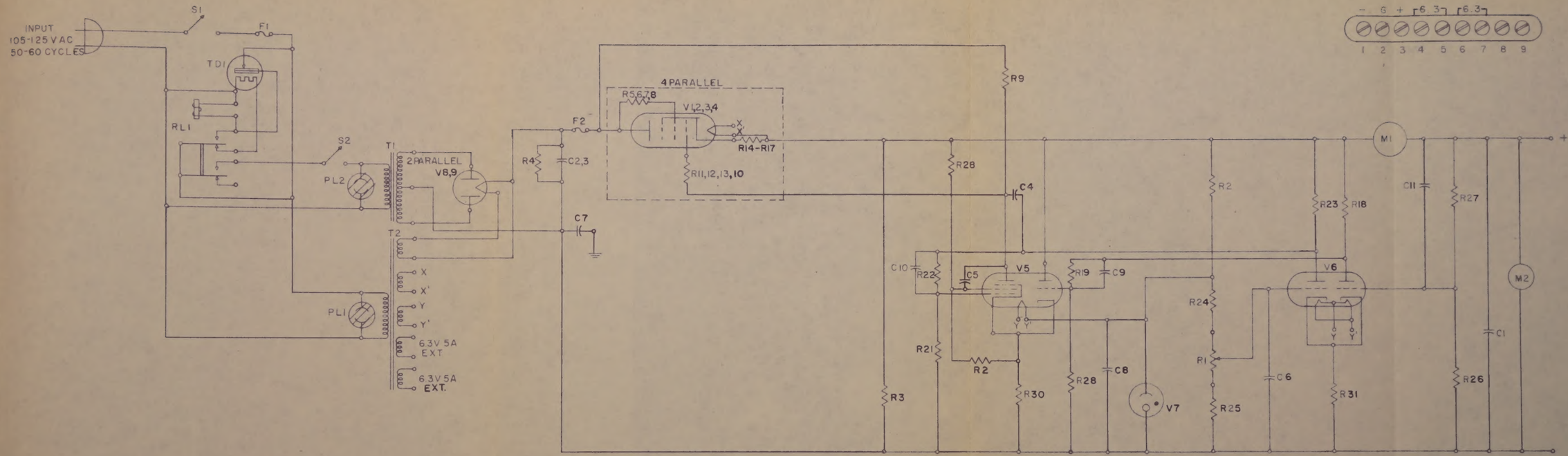
REPAIRS: Should any trouble develop in the instrument, it may be serviced with the aid of the schematic diagram. Major repairs, however, are usually handled by the factory.

Under no circumstances should the instrument be returned to the factory without proper authorization and shipping instructions. In any correspondence with the factory concerning repairs, the type and serial number of the instrument must be given together with a description of the trouble encountered.

PARTS LIST - MODEL KR4, KR4M

DRAWING S-KR4, KR4M-01

C1	- 4	MF	1000 WV
C2	- 8	MF	1000 WV
C3	- 8	MF	1000 WV
C4	- 22	MMF	2000 WV
C5	- .001	MF	2000 WV
C6	- 0.1	MF	600 WV
C7	- 0.25	MF	600 WV
C8	- 0.1	MF	600 WV
C9	- 500	MMF	2000 WV
C10	- 500	MMF	2000 WV
C11	- 0.1	MF	600 WV
F1	- 6	Amp. Fuse	
F2	- 1/2	Amp. Fuse	
*M1	- Milliammeter: 0-300 MA DC		
*M2	- Voltmeter: 0-500 V DC		
PL1	- Neon Pilot Light NE-51		
PL2	- Neon Pilot Light NE-51		
R1	- 250	K	2 watt Pot.
R2	- 30	K	10 watt
R3	- 50	K	10 watt
R4	- 100	K	20 watt
R5	- 100	Ohm	1 watt
R6	- 100	Ohm	1 watt
R7	- 100	Ohm	1 watt
R8	- 100	Ohm	1 watt
R9	- 1.2	Meg.	1 watt
R10	- 100	Ohm	1 watt
R11	- 100	Ohm	1 watt
R12	- 100	Ohm	1 watt
R13	- 100	Ohm	1 watt
R14	- 47	Ohm	1 watt
R15	- 47	Ohm	1 watt
R16	- 47	Ohm	1 watt
R17	- 47	Ohm	1 watt
R18	- 560	K	1 watt
R19	- 1.2	Meg.	1 watt
R20	- 3.6	Meg.	1 watt
R21	- 3.6	Meg.	1 watt
R22	- 1.2	Meg.	1 watt
R23	- 560	K	1 watt



VOLTAGE RANGE
195-325V DC 300MA
6.3V AC 5AMPS
6.3V AC 5AMPS

M1, M2 — KR4M ONLY

KEPCO LABORATORIES		
FLUSHING NEW YORK		
ITEM: POWER SUPPLY	DES.	GROUP
	APPD.	POCKET
	DFTM. W.V.D.	FOLDER
MODEL KR4-KR4M	CHKD.	ORIGINALS
DWG. NO. S-KR4-KR4M-01	DATE 11-14-56	SHEET OF